

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of

Third Periodic Review of the  
Commission's Rules and Policies  
Affecting the Conversion  
To Digital Television

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**MB DOCKET NO. 07-91**

**COMMENTS OF THE PENNSYLVANIA STATE UNIVERSITY**

The Pennsylvania State University (hereinafter, the "University"), by its undersigned attorney, hereby respectfully submits its Comments to the Commission in the above-captioned proceeding in response to the *Notice of Proposed Rule Making* ("NPRM"), FCC 07-70, released on May 18, 2007, 22 FCC Rcd \_\_\_, 72 Fed. Reg. 37,310 (published July 9, 2007).<sup>1</sup> The following is respectfully shown:

The University is the licensee of primary analog VHF noncommercial, educational television broadcasting station WPSU-TV, formerly known as WPSX-TV, NTSC Channel \*3, Clearfield, Pennsylvania (Facility Identification No. 66219).<sup>2</sup> The University also holds a construction permit from the Commission and a special temporary authorization from the Commission, as extended, that authorize the University to build and operate primary digital

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<sup>1</sup> These Comments are timely submitted, in accordance with the *Order Granting Extension of Time for Filing Comments and Reply Comments* in this proceeding, DA 07-3518, released August 6, 2007 (Chief, Media Bureau).

<sup>2</sup> File No. BMLET-20061108ABP, granted on July 17, 2007.

UHF noncommercial, educational television broadcasting station WPSU-DT on Channel \*15 in Clearfield.<sup>3</sup>

In order to appreciate the University's perspective with regard to this proceeding, it will be helpful to illuminate some of the history surrounding WPSU-DT. The process of applying for the Commission's authorization to construct the transmission facilities for WPSX-DT (now known as WPSU-DT; for the sake of consistency, we will refer to the station as WPSU-DT throughout these Comments) began with an extensive effort to optimize the service to be provided by the station. This effort, which began in 1998, included a search for a suitable site for the transmitter, and special consideration was given to providing service to the rural areas in the northern tier of the station's coverage area. The necessity to provide service to the population centers in the southern reaches of the station's coverage area was also taken into account.

At the beginning of May, 2000, an application was filed with the FCC for a construction permit ("CP") to install the high-power transmitter for WPSU-DT at Clearfield. The process used in preparing the application included an analysis of interference to other television stations, both analog and digital, in the U.S. Since WPSU-DT would be in the zone where coordination between the U.S. and Canada is required, and since the necessary information was available regarding Canadian analog stations, interference studies were also conducted with respect to such Canadian analog stations. At that time, information was not available with regard to Canadian digital television allotments, and the task of determining potential interference between WPSU-DT and any Canadian digital station was left to the FCC and its counterpart in Canada, as was the practice at that time. To highlight this matter,

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<sup>3</sup> See File Nos. BPEDT-20000501AHR, granted on August 8, 2000, and BEDSTA-20060630DEK (pending)

the following text was included in the application that the University made to the FCC for the CP for WPSU-DT (File No. BPEDT-20000501AHR):

Stations within 400 km of the Canadian border require coordination between the U.S. and Canadian governments as part of the authorization process. The McGeorge Road site [proposed in this application] falls within that distance to the Canadian border; therefore coordination will be required in the case of this WPSX-DT application.

Canadian NTSC stations are included in the FCC station database. Consequently, they were studied using the normal Longley-Rice method as it was applied to U.S. stations. Canadian DTV allotments do not yet appear in the database. So they were not studied. The latest information available from the FCC International Bureau indicates that, while a new Letter of Understanding is negotiated between the two governments, applications are being coordinated on a case-by-case basis using the Canadian interference analysis methods. The appropriate studies are indicated as being carried out by FCC staff and so have not been included in this application.

In August, 2000, the FCC granted a CP to the University for WPSU-DT. Since the FCC had been put on notice that coordination with Canada was required for Canadian digital television ("DTV") allotments and that it was expected that such coordination would be treated on a case-by-case basis, when the FCC granted the CP it was understood on the University's part that the necessary coordination with Canada had taken place.

Because the University intended to be an early adopter of DTV, work commenced immediately on implementation of the WPSU-DT transmission facility. By early March, 2003, construction was complete, and WPSU-DT was ready to go on the air.

In the process of building its DTV transmission facility, the University purchasing authorities sought bids from qualified vendors for the antenna to be used for the system. The antenna vendor that was ultimately selected, based upon a combination of price and performance with respect to its proposal, had a design that resulted in a slightly different radiation pattern than the one that had been included in the original CP application for WPSU-DT. The result of the difference in pattern was to radiate somewhat less signal

toward Canada and somewhat more signal to the south and east, inside the U.S. Because the signal level was being reduced toward Canada, because there was a need to proceed reasonably quickly with construction of the DTV facilities -- due to time constraints on the government funding grant that supported the transmitter construction -- and because interference studies showed negligible effect on stations in the U.S., the University proceeded with construction of its digital transmitter facility under the original CP, not being fully aware that the change in radiation pattern was one that required prior FCC approval by means of an application for a modified CP.

Prior to applying for a license to cover the completion of the construction of the WPSU-DT facilities, the University became aware that a modified CP would be required from the FCC, because the pattern of the antenna selected for use by the station exceeded the pattern of the antenna specified in the original CP in two directions -- both inside the U.S. An application for a modified CP was filed in late May, 2003 <sup>4</sup> (and, in the meantime, the University applied for, and received, a special temporary authorization from the Commission to have built, and to operate, the WPSU-DT facilities at variance from the specifications in the original CP, utilizing the antenna that had been selected and operating at reduced power).<sup>5</sup> The FCC reviewed the application for the modified CP and presumably found it acceptable according to U.S. rules and regulations, because it sent the application to Canada for coordination -- a process it does not follow unless it already has satisfied itself that the application is acceptable under U.S. provisions.

The University was then informed that Canada rejected the coordination for the

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<sup>4</sup> See File No. BMPEDT-20030527ADP

<sup>5</sup> File No. BDSTA-20030424ACA, granted May 9, 2003, as subsequently extended on multiple occasions.

WPSU-DT CP modification application. Canadian authorities have reportedly claimed that the proposal extended the coverage of WPSU-DT and that the extension would cause additional interference to one of Canada's allotted, but not constructed, facilities in Hamilton, Ontario. This would seem to be impossible, because the signal was being reduced toward the Canadian allotment relative to the signal from the already authorized, and presumably previously-coordinated, WPSU-DT facility specified in the University's original CP for the station from the Commission. Months went by as, according to the University's information, the FCC International Bureau negotiated with Canadian authorities seeking a resolution to the matter.

In several conversations between members of the FCC staff, in particular those in the International Bureau, and the University's technical consultant, it emerged that the Commission failed to coordinate the original WPSU-DT CP application with Canada. As a result, Canada sees as an increase in interference what the University, in changing the antenna pattern from what had originally been proposed to and authorized by the FCC, has perceived as a reduction in interfering signals.

The University has been informally advised that negotiations between the U.S. and Canada over coordination of the WPSU-DT CP modification application have continued over the past several years at various intervals. To this point, the University has received no additional information from the FCC on the current status of those negotiations. This uncertainty means that U.S. taxpayer dollars have been used to fund construction of facilities that are somewhat in a state of flux.

In the meantime, the Commission issued its *Seventh Further Notice of Proposed Rule Making in MB Docket No. 87-268, Advanced Television Systems and their Impact upon*

*the Existing Television Broadcast Service*, 21 FCC Rcd 12,100, 71 Fed. Reg. 66,592 (published November 15, 2006) (the “7th FNPRM”). Appendix B to the 7th FNPRM sets forth the proposed parameters for the allotment of DTV Channel \*15 at Clearfield. Those parameters reflect the facilities of WPSU-DT as they have been actually constructed, and as they are set forth in the application for the modified CP.

The University thus finds itself in a unique position. It has in fact completed the construction of its post-transition digital facilities on its post-transition channel, fully in accordance with the parameters set forth in Appendix B to the 7th FNPRM, but is not in a position to commence operating with those facilities until the issue of Canadian concurrence shall have been resolved. Moreover, as a state-affiliated institution of higher learning, whose facilities were constructed in major part with the use of public funding, the University is not in a position now to undertake any significant changes in those parameters.

While the University remains in consultation with the Commission’s staff regarding the Canadian concurrence matter, as the *NPRM* suggests (Para. 23), the University does not believe that it should be compelled to depart from the parameters set forth in Appendix B to the 7th FNPRM or suffer any coverage curtailment or other degradation of current or future potential service in order to obtain Canadian concurrence, under the circumstances presented.

Specifically, the University requests that the Commission provide ongoing future protection to the full service area for the facilities of WPSU-DT as set forth in Appendix B, even if (due to the Canadian concurrence issue described above) the University’s ability actually to commence operating those facilities may be delayed while the station continues

to operate pursuant to the outstanding special temporary authorization, as extended (*see* note 5, *supra*).

To that end, the University is encouraged by the observation in the Commission's recently-issued *Seventh Report and Order and Eighth Further Notice of Proposed Rule Making* in MB Docket No. 87-268, *Advanced Television Systems and their Impact upon the Existing Television Broadcast Service*, FCC 07-138, released August 6, 2007, to the effect that

our international negotiations are continuing in a cooperative manner and... we do not believe that these negotiations will delay stations' ability to construct their post-transition facilities. We continue to believe that international coordination of digital allotments will proceed in a manner that will allow affected stations to construct digital facilities by the transition deadline.

*Id.* at Para. 103 (footnote omitted).

Respectfully submitted,

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